

### Abstract

The present invention relates to luciferase having resistance to a surfactant and a method for measuring intracellular ATP which is characterized in that the luciferase having resistance to a surfactant is used in this method comprising the steps of: a first step wherein ATP is extracted from cells in a sample; a second step wherein light emission is produced by adding a luminescence reagent containing luciferase to the extracted ATP solution; and a third step wherein the light emission is measured.